IN THE CLAIMS

Please replace all prior versions and claims listing with the following claims listing.

CLAIMS LISTING

1. (currently amended) A method of forming a cross-linked coating on a medical device, comprising the steps of:

(a) immersing the medical device in a first solution comprising an organic solvent and a multifunctional crosslinking agent selected from the group consisting of a *bis*-variant of polyethylene glycol or polyethylene oxide, and

(b) immersing the medical device in a second solution wherein the second solution ~~comprising~~ comprises an organic solvent and a cross-linkable biomolecule rendered surface adsorbable by conjugation with 1-30 hydrophobic benzylated silyl groups.

2. (original) The method of claim 1, wherein prior to immersing the medical device in the first solution or second solution as provided in steps (a) and (b), the medical device is immersed in a wetting solution.

3. (original) The method of claim 1 wherein the first solution does not comprise water and the second solution comprises from about 10 to 80 percent water by volume.

4-7 (cancel)

8. (currently amended) A method of forming a thromboresistant coating on a porous surface of a medical device, comprising the ordered steps of:

(a) providing a medical device with a porous surface;

~~(b) wetting the porous surface by immersion in a wetting solution;~~

~~(c)~~(b) immersing the ~~porous surface~~ medical device in a first solution comprising ~~a first~~ an organic solvent and a multifunctional crosslinking agent selected from the group consisting of a *bis*-variant of polyethylene glycol or polyethylene oxide; and

~~(d)~~(c) immersing the ~~porous surface~~ medical device in a second solution ~~comprising a second organic solvent and a cross-linkable biomolecule and~~ wherein the second solution contains a cross-linkable biomolecule rendered surface adsorbable by conjugation with 1-30 hydrophobic benzylated silyl groups.

~~(e) immersing the porous surface in the first solution comprising the first organic solvent and the multifunctional crosslinking agent.~~

9. (original) The method of claim 8, wherein the ~~porous surface~~ medical device comprises expanded polytetrafluoroethylene.

10. (currently amended) The method of claim ~~8~~ 41, wherein the wetting solution ~~comprises~~ is an organic solvent.

11. (currently amended) The method of claim 10, wherein the organic solvent ~~comprises~~ is acetone, isopropanol, acetonitrile, methanol, ethanol or ~~a~~ any combination thereof.

12. (cancel)

13. (currently amended) The method of claim ~~12~~ 8, wherein the *bis*-variant of polyethylene glycol[[,]] or polyethylene oxide~~, or polyethylene glycol~~ is bis-(benzotriazole carbonate) polyethylene glycol.

14. (currently amended) The method of claim ~~12~~ 13, wherein the *bis*-variant of polyethylene glycol[[,]] or polyethylene oxide~~, or polyethylene glycol~~ is at a concentration between about 0.001 mg/mL and 500 mg/mL.

15. (currently amended) The method of claim ~~12~~ 13, wherein the *bis*-variant of polyethylene glycol[[,]] or polyethylene oxide~~, or polyethylene glycol~~ is at a concentration between about 0.2 mg/mL and 10 mg/mL.

16. (currently amended) The method of claim ~~12~~ 8, wherein the first organic solvent is acetonitrile or acetone, and wherein the first solution does not comprise water.

17. (original) The method of claim 8, wherein the first solution does not comprise water and the second solution comprises from about 10 to 80 percent water by volume.

18. (cancel)

19. (currently amended) The method of claim ~~18~~ 8, wherein the cross-linkable ~~adsorbable~~ biomolecule ~~comprises~~ is a conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule.

20. (original) The method of claim 19, wherein the conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule is from 1 to 30 hydrophobic silyl moieties conjugated to the heparin activity biomolecule.

21. (original) The method of claim 20, wherein the conjugate of from 1 to 30 hydrophobic silyl moieties and the heparin activity biomolecule is at a concentration in the second solution of from about 0.01% to about 10%.

22. (original) The method of claim 20, wherein the conjugate of from 1 to 30 hydrophobic silyl moieties and the heparin activity biomolecule is at a concentration in the second solution of from about .25% to about 1.5%.

23. (original) The method of claim 20, wherein the conjugate of from 1 to 30 hydrophobic silyl moieties and the heparin activity biomolecule is benzyl-*bis*(dimethylsilylmethyl)$_x$-oxycarbamoyl-heparin.

24. (cancel)

25. (original) The method of claim 24, wherein the second solution further comprises from about 10 to 80 percent water by volume.

26. (original) The method of claim 8, wherein immersing in each step is for between about 5 minutes and two hours.

27. (currently amended) The method of claim 26, wherein immersing the ~~porous surface~~ medical device in the first solution is in each step for between about 15 minutes and about one hour.

28. (currently amended) The method of claim 26, wherein immersing the ~~porous surface~~ medical device in the second solution is for between about 45 minutes and about 75 minutes.

29. (withdrawn) A thromboresistant expanded polytetrafluoroethylene vascular graft comprising:

a tubular expanded polytetrafluoroethylene construct with an interior lumen; and

a cross-linked co-polymer coating on the surface of the interior lumen, the cross-linked co-polymer coating consisting essentially of a conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule cross-linked with a *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol.

30. (withdrawn) The graft of claim 29, wherein the conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule is from 1 to 30 hydrophobic silyl moieties conjugated to the heparin activity biomolecule.

31. (withdrawn) The graft of claim 29, wherein the *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol is bis-(benzotriazole carbonate) polyethylene glycol.

32. (withdrawn) A medical device with a thromboresistant blood-contacting surface, comprising:

a medical device with at least one porous blood-contacting surface; and

a cross-linked co-polymer coating on the porous surface, the cross-linked co-polymer coating consisting essentially of a conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule cross-linked with a *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol.

33. (withdrawn) The medical device of claim 32, wherein the at least one porous blood-contacting surface comprises expanded polytetrafluoroethylene.

34. (withdrawn) The medical device of claim 32, wherein the at least one porous blood-contacting surface comprises a woven polymeric surface.

35. (withdrawn) The medical device of claim 32, wherein the conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule is from 1 to 30 hydrophobic silyl moieties conjugated to the heparin activity biomolecule.

36. (withdrawn) The graft of claim 32, wherein the *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol is bis-(benzotriazole carbonate) polyethylene glycol.

37. (withdrawn) A thromboresistant coating for a medical device, comprising an in situ cross-linked co-polymer consisting essentially of a conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule cross-linked with a *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol.

38. (withdrawn) The coating of claim 37, wherein the conjugate of at least one prosthetic hydrophobic unit and a heparin activity biomolecule is from 1 to 30 hydrophobic silyl moieties conjugated to the heparin activity biomolecule.

39. (withdrawn) The coating of claim 37, wherein the *bis*-variant of polyethylene glycol, polyethylene oxide, or polyethylene glycol is bis-(benzotriazole carbonate) polyethylene glycol.

40. (new) The method of claim 8 further comprising immersing the medical device in the first solution after step (c).

41. (new) The method of claim 8 further comprising wetting the medical device by immersion in a wetting solution prior to step (b).